

CASE STUDY

Subgrade Stabilisation | Loading Platform | Kusile Power Station

May 2011

Client Stefanutti & Bressan

Contractor Eskom

Consultant Black & Veatch

Product **Tensar TriAx™ 160** | 35 000m²

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Problem

During construction phase of the new power station, the subgrade over which cranes and other heavy machinery needed to operate was found to have a very low bearing capacity. Subgrade stabilisation was needed to increase bearing capacity in order to have a stable surface for heavy machinery to work on.

Solution

The high traffic area was mechanically stabilised by excavating a shallow layer of aggregate and laying TriAx™ 160 geogrid over the compacted in situ soil. The grid, providing a granular interlocking function was then covered with a compacted gravel overlay.



Kusile loading platform - compacted gravel covers the TriAx™ which is placed on top of compacted in situ soil.

Benefits

Deeper excavation that would have been required for standard methods were avoided. This resulted in cost-and time-savings which helped engineers meet sustainability objectives. Shallow excavation also meant less natural aggregate needed to be imported for the overlay.



35 000sqm of TriAx™ evens out the load on the loading platform.